

**The Agreement on Textiles and Clothing:  
Potential Effects on Gender Equality in  
Pakistan**

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## Abbreviations

ADB	Asian Development Bank
Approx.	approximately
APTMA	All Pakistan Textile Mills Association
ATC	Agreement on Textiles and Clothing
EC	European Community
Ed./eds	editor/s
e.g.	for example
EU	European Union
FLFP	female labour force participation
GATT	General Agreement on Tariffs and Trade
GSP	Generalised System of Preferences
HK	Hong Kong
i.e.	that is
Kg	kilogram
MFA	Multi-Fibre Arrangement
MLFP	male labour force participation
Mt	metric ton
No.	Number
NTB	non-tariff barrier to trade
OSH	occupational safety and health
Pc	piece
PKR	Pakistan Rupee
R&D	research and development
SDPI	Sustainable Development Policy Institute
SMEDA	Small & Medium Enterprise Development Authority
Sq.	Square
T	ton
TMB	Textile Monitoring Body
UNCTAD	United Nations Conference on Trade and Development
UNRISD	United Nations Research Institute for Social Development
US	United States
USD	United States Dollar
USITC	United States International Trade Commission
WTO	World Trade Organisation

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# **The Agreement on Textiles and Clothing: Potential Effects on Gender Equality in Pakistan**

Karin Astrid Siegmann

## **Abstract**

The government has realized that the textile and clothing sector is one sector that offers good prospects for diversification away from traditional commodity exports, for entry into the area of manufacturers, for absorption of large pools of manpower, for crossing the big divide between the rural and urban sectors, for poverty alleviation, and for gender empowerment.” (Ministry of Finance, 2003, emphasis added)

In 2005, the Agreement on Textiles and Clothing (ATC) will give way to more liberalised global trade in textiles and clothing (T&C). The T&C industry is Pakistan’s major export engine. It also is a major employer of female workers. In the context of the social seclusion of women in Pakistan, the strong representation of women in the T&C industry makes the ATC implementation a gender equality issue.

So far, the labour market implications of the change in the trade regime in general and its effects on gendered access to employment, in particular, have been neglected completely. The paper highlights the potential impact of the phase out of the textile quota regime on gendered employment in Pakistan.

## **1. The Agreement on Textiles and Clothing: A Gender Issue**

In January 2005, the quota system for imports of textiles and clothing will phase out and give way to more liberalised global trade in textiles and clothing.<sup>1</sup> The Multi-fibre Arrangement (MFA) was established in 1974 and defined quotas for textile imports that are to be gradually phased out under the Agreement on Textiles and Clothing (ATC), launched in 1995. Accounting for more than two thirds of its exports, the textile industry is Pakistan’s major export engine. Besides having considerable macro-economic importance for the South Asian economy, the textile industry is also a major employer of female workers. An estimated 30% of the sector’s workforce is female as compared to a national average of 15% (Federal Bureau of Statistics, 2003). In the context of “purdah”, that is, the social seclusion of women commonly practised in Pakistan, female labour market participation is negatively affected. Against this

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1 Textiles are woven or knit fabric, made from natural or synthetic fibres, filaments or yarns, suitable for further processing into apparel (Oxfam International, 2004). Clothing relates to made-up articles, wholly or chiefly of textile materials, commonly to be worn on a human body.

background, the strong representation of women in the textile and clothing industry makes the ATC a gender equality issue – potentially impinging on one of the few sectors that provides paid employment to women in Pakistan.

Some research has been conducted on the economic implications of the ATC for Pakistan. Whereas some observers expect the Pakistani textile industry to remain a competitive supplier in cotton yarns and fabrics due to its cheap labour supply, access to local raw cotton guaranteeing a natural backward linkage in the textile chain, and favourable business climate (USITC, 2004), others emphasise under-investment in technology and the lack of product diversification as factors detracting from competitiveness (Kazmi, 2002). However, the labour market implications of the ATC in general and its effects on gendered access to employment, in particular, have been neglected completely.

This is the case despite the fact that the textile and clothing sector absorbs a disproportionate share of female employment globally. Women account for more than two thirds of the global labour force in the sector, and employment in textiles and clothing accounts for almost one fifth of the total world female labour force in manufacturing (Joekes, 1995). Pakistan is no exception. The textile and clothing sector is the largest employer of female workers in Pakistani manufacturing (Azam, 2004). Previous research shows that trade liberalisation has often increased relative female employment in labour-intensive manufacturing (Çağatay, 2001). Whether such an increase is likely to be a result of the ATC's full implementation in Pakistan will be explored during the following pages. Also, whether such female labour market integration leads to women's economic empowerment (Sen, 1990) as assumed in the citation above, or rather increases their total workload without changing their inferior social position (Elson, 1999) is highly disputed.

The objective of the paper is to provide timely input on potential gender implications of the textile quota phase out in January 2005 and possible policy reactions in Pakistan. Hereby, the focus is on the effects on the gender composition of the workforce. Section 3 introduces the methodological approach applied. An overview of the ATC is provided in section 4. Sections 5 and 6 give an introduction to the Pakistani textile and clothing industry, with a special eye on the gender composition of the workforce and working conditions (section 5) and its role in international trade (section 6), respectively. Potential effects of the quota phase out on the gender composition of and working conditions in the Pakistani textile and clothing industry and possible policy reactions are then discussed in section 7. The next section will briefly review selected other countries' experiences with and theoretical assumptions about gendered effects of trade liberalisation in manufacturing.

## **2. Trade Liberalisation and Gendered Employment**

Labour-intensive production has been the main driving force of the export-oriented model in developing countries during the past 20 years. The textile and clothing sector in particular has been the classical start-up industry for developing countries to export on their own account (Joekes, 1995). Bangladesh is an extreme case with the textile and clothing sector being responsible for 78% of the country's exports earnings in 2001 (Oxfam International, 2004) as compared to only 0.4% in 1980-81 (Rahman, 1992, quoted in Joekes, 1995), and with a 70-80% female workforce (Majumdar and Chaudhuri, 1994, quoted in Miller and Vivian, 2002).

The long-term implications of global trade liberalisation on gendered work have been analysed, establishing export-orientation as a crucial factor for increasing relative female employment. Wood (1991) identifies a positive relationship between a country's share of exports to the North and female intensity in the industrial labour force. Çağatay (2001) gives a more recent overview of the empirical findings with regards to the impact of export-orientation on the gender composition of the workforce. The prediction of a rise in relative female employment with increasing export-orientation is supported especially for manufacturing in developing countries.

This can be explained by relating export performance to export prices. All other things equal, the latter are a positive function of average wages. Globally, women earn lower average wages relative to their male colleagues. Such gender-wage differentials may, therefore, make the recruitment of women in export-oriented industries more attractive. The differential allows prices for export goods to be lowered, contributing to higher quantities of exports demanded. It, thus, has the potential to increase the competitiveness of the respective firms and consequently enhance their growth (Seguino, 2000).

However, lower female average wages may not tell the whole story. On the one hand, not all export-oriented employment is female. On the other hand, in some middle-income countries, such as South Korea and Mexico, an emerging trend of defeminisation of typically female jobs can, however, be observed. "Defeminisation" denotes the decrease in the female share of the workforce. Mehra and Gammage (1999) relate this shift to a restructuring in the export sector of the respective countries, connected to a process of technologisation. Siegmann (2004) explains this by making reference to social norms, particularly with respect to women's reproductive obligations.<sup>2</sup> Particularly in tasks requiring advanced technical skills, gender gaps in education, and female workers' weaker labour market attachment in the form of shorter hours worked and shorter length of employment disadvantage female workers' employment. The asymmetric gender division of reproductive tasks influences these. This is because the gender division of work in the reproductive economy discourages human capital acquisition for women as on average, their shorter work life promises less returns to investment in schooling. In addition to this, obligations in the domestic sphere, for example, for childcare, result in a higher labour turnover for female workers.

Such interaction between reproductive and market work might explain a process of skill polarisation resulting from internationalised production as identified by Standing (1999). According to him, enterprises introduce technologies that need a small number of highly specialised employees and a large workforce with little training requirements. This leads to lower returns to on-the-job continuity, which induces the growth of job insecurity but also provides an incentive to hire women whose labour turnover commonly is higher. Skill polarisation has a gender dimension in that jobs requiring "craft" skills traditionally have been the domain of men, whereas tasks requiring little skill are associated with women.<sup>3</sup>

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2 "Reproductive work" refers to activities for the care and development of people, performed mostly by women under conditions of unpaid labour. "Productive activities", in contrast, refer to income generating activities, generally linked to the market (Çağatay, 1998).

3 Steinberg (1990) shows that the notion of skill itself is a social and gendered construct. Skills typically acquired and exerted by females are often considered less advanced than those taken over by males.

Regarding short-term effects of trade liberalisation on gendered employment, three differing hypotheses have been put forward (Ertürk and Çağatay, 1995): Firstly, the buffer hypothesis views women as a flexible labour reserve whose labour market participation increases in boom periods and decreases with economic downturns. Secondly, the segmentation hypothesis sees the concentration of women in several industries and occupations – or “occupational segregation”<sup>4</sup> – as the cause for protection of women against being hired and dismissed procyclically. And, finally, the substitution hypothesis assumes female workers to be substituted for male workers in case of cyclical downswings due to the gender wage gap and a lower degree of unionisation among women workers.

The full implementation of the ATC in January 2005, which will be discussed in more detail in section 4, represents a quantum leap in the liberalisation of global trade in textiles and clothing. So far, the existence of quotas has reduced the supply of these goods in the restricted markets and has thus raised their prices. Estimates suggest that an average European family loses about EURO 270 a year resulting from the higher costs of textiles and clothing induced by the quota regime (Oxfam International, 2004). On the other hand, the current regime has depressed prices in unrestricted markets as the existence of quotas has diverted some trade to those markets (World Bank, 2004). As the current quota markets are the main global demanders of textiles and clothing, the abolition of the quota regime will lead to a global decrease in prices for textiles and clothing, thus boosting global demand, and intensifying global trade in textiles and clothing.

Based on such central economics of the quotas and their abolition, a large number of contributions as diverse as the World Bank and Oxfam International expect overall welfare gains from the abolition of the quota regime (World Bank, 2004; Oxfam International, 2004). However, there will be winners and losers among developing countries. Female workers in this sector in some least developed countries will be particularly affected, as production will move to large countries with a huge female labour surplus (UNCTAD, 2004). Countries such as Bangladesh and Sri Lanka have benefited from the quotas allotted to their textile and clothing exports and are likely to lose hundreds of thousands of jobs – most of them female – after the abolition of the quota regime. India, on the other hand, will most probably be able to expand its industry’s market share.

In Pakistan’s case, the likely consequences are less clear and will be explored in the following sections. They will look at whether similar to previous experiences in other developing countries with trade liberalisation, relative female employment in the Pakistani textile and clothing industry will increase due to the abolition of the quota regime. Questions to be answered are, first, what are the likely effects of the full implementation of the quota regime on the performance and structure of the Pakistani textile and clothing industry? Secondly, what are the implications on the gender composition of the industry’s workforce?

### 3. Approach

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4 “Occupational segregation” relates to the dissimilar distribution of women and men across occupational categories. Horizontal and vertical segregation can be distinguished. “Horizontal segregation” refers to the distribution of female and male workers across economic sectors and tasks, whereas “vertical segregation” denotes their distribution across positions within a firm’s hierarchy (ILO, 2003).

In order to answer the stated questions, ten semi-standardised interviews with managers in the textile and clothing industry were conducted in Faisalabad in April 2004. Qualitative interviews, rather than statistical data, were chosen as the basis for the analysis due to the lack of sufficiently disaggregated statistical data about the gender structure of the workforce in the textile and clothing industry. Besides, statistics - if available - would not have reflected the dynamic features of the industry currently restructuring. The interviewees were asked about expected effects of and preparations for the phase out of the quota regime under the ATC on the one hand and about the gendered employment structure in their establishments on the other hand. The respective plants were also visited, thus part of the empirical material analysed is gathered by observational techniques. Besides, key informant interviews with workers' representatives, experts at the Ministry of Commerce, and industrial associations' representatives have been conducted.

The regional choice is based on intensity sampling. "Intensity sampling" refers to the selection of cases that display variables of interest with high intensity (Patton, 1990). The relevant variable in this case is the high regional concentration of textile and clothing units in Faisalabad and the surroundings. For the selection of establishments for semi-standardised interviews and observation, snowball sampling has been applied, aided by the Department of Fibre Technology at the University of Agriculture in Faisalabad.

The majority of interviews took place in large, composite units that are predominantly export-oriented. However, there was considerable variation in size, ranging from Pakistan's largest textile company with 27,500 employees to cottage industries of less than ten workers (Table A1 in the appendix). Although most of the companies visited integrate several stages of textile processing, such as weaving, processing, and stitching, one specialises in dyeing, one in weaving, and one in stitching. The latter two are cottage industries. Seven out of the ten companies visited include stitching units. Those are of particular importance for female employment as will be discussed in more detail below. None of the establishments visited supplies the domestic market only, three produce both for export and for the domestic use, and seven are 100% export-oriented. Main export destinations for all companies visited are the quota markets<sup>5</sup> of the United States (US) and the European Union (EU).

#### **4. The Agreement on Textiles and Clothing**

In order to protect domestic industries facing damage from increasing imports particularly from developing countries, developed countries like the US and various European countries have placed some form of quantitative restrictions on the import of textiles and clothing since the 1950s. The MFA, establishing the most far-reaching quantitative limits, was enforced in 1974. It allows industrialised countries to apply quotas either unilaterally or based on bilateral agreements on selective basis on textile and clothing imports, complemented by high tariffs, and other non-tariff barriers to trade (NTBs).

Since 1995, the ATC agreed upon at the Marrakesh ministerial meeting of the World Trade Organisation (WTO) in 1994, has taken over from the MFA. The agreement advocates successive expansion of imports under the existing quotas, integration of textile and

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5 Markets restricting imports of textile and clothing under the MFA include the US, the EU, Canada, and - until 1998 (Emerging Textiles, 2004) - Norway.

clothing products under the General Agreement on Tariffs and Trade (GATT) rules<sup>6</sup>, and safeguards to deal with market disruptions during transition. This process takes place between January 1995 and January 2005. Liberalisation of trade in textiles and clothing was an important issue for many developing countries, amongst others Pakistan. Its negotiators were disappointed by the slow speed of integration of the sector under GATT rules (WTO, 1995). Developed countries agreed to a gradual abolition of the quota system in the Uruguay round of trade negotiations, as by the early 1990s, they had already restructured from classical manufacturing-based economies to service societies. Accepting the phase out of the quota system under the ATC was a bargaining chip for developed countries to achieve concessions in the liberalisation of trade in services (Ferenschild and Wick, 2004).

In the first phase of the ATC, which commenced in 1995, countries imposing import quotas integrated into the GATT products that in 1990 accounted for at least 16% of the total volume of products imported. The second phase, starting in 1998, included products accounting for at least 17% of total import volume, and the third phase – from January 2002 - integrated products accounting for at least 18% of the imports. The remaining products will be covered by GATT rules at the end of the implementation period that is in January 2005. The agreement also stipulates annual growth rates of the quantities of imports and establishes the Textile Monitoring Body (TMB) as a supervisory body for the implementation of the ATC.

The abolition of the quotas so far did not lead to significant liberalisation of trade in textiles and clothing because the quotas abolished by importing countries hitherto are largely those “in which developing countries had no comparative advantage” (World Bank, 2004). Put differently, importing countries “liberalised” the imports of products that were not subject to restrictions before (Oxfam International, 2004) and delayed liberalisation in sensitive product categories. Apart from that, imports of textile and clothing goods face high tariff walls, being three times higher than average tariffs for industrial products, and an abusive use of protective measures, such as anti-dumping measures of importers (Oxfam International, 2004) although a reduction of such NTBs are part of the ATC (WTO, 1994).

## **5. The Pakistani Textile and Clothing Industry**

When Pakistan came into being, no more than two textile mills were established in the country as a colonial heritage (Ghayur and Zar, 1993). Since independence, the Pakistani textile industry has played a crucial role in industrial development. As in other developing countries, the sector’s low research and development (R&D) intensity favoured the engagement of domestic companies (Joekes, 1995). The large scale textile sector now caters to 9% of the country’s GDP, 46% of manufacturing activity, 68% of Pakistan’s export earnings, and employs 38% of industrial sector workers (Board of Investment, 2004; Ministry of Finance, 2004). Besides, forward and backward linkages of the sector are significant. They include cotton cultivation and trading services.

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6 The objective of GATT rules is to liberalise trade by negotiating down barriers to trade. They imply non-discrimination between trading partners as well as equal treatment of foreign and domestically produced goods. Developing countries are given special treatment and exceptions from these rules.

The focus of Pakistan's textile and clothing sector is on early stages of processing, i.e. ginning, spinning, and weaving (Table 1). In 2002, with a production of 1.8 million metric tons of cotton yarn and 1.1 million metric tons of cotton cloth, Pakistan was the third largest producer of both cotton yarn and cotton cloth after China and India (APTMA, 2004b and 2004c). Although large, organised mills also make cotton fabric, Pakistan's weaving sector is dominated by small, family owned power-loom weavers as can be gauged from Table 1. This cottage or non-mill sector represents about 90% of Pakistan's effective (cotton) weaving capacity (Ministry of Finance, 2003). The number of apparel production units is estimated at about 5,000 (Ministry of Finance, 2003), mainly located in Karachi and Lahore, with roughly 80% of it being cottage industry.

Table 1: Size and capacity of Pakistan's textile and clothing sector

Sector	No. of units	Size (installed capacity)	Production
Ginning	1221	5,488 saws	10,314 million bales
Spinning	445	a) 9.217 million spindles b) 147,852 rotors	1,758 million kg yarn
Weaving			
Composite units	50	20,000 – 25,000 shuttle-less looms	5,600 million sq. mt (approx.)
Independent mills	140	225,000 conventional looms	
Power loom sector			
Finishing			2,700 million sq. mt
Organized sector	106		
Small scale sector	625		
Garment units	5,000	450,000 sewing machines	650 million pc
Terry towels	400	7,600 looms	55 million. kg
Canvas	100	2,000 looms	35 million kg
Knitwear	700	21,000 knitting machines	5.50 million pc

Source: Board of Investment (2004)

Outsourcing of the production is stated to be uncommon in the factories visited. In three of the ten establishments investigated, only in case of excess orders, parts of the production are outsourced. This is in contrast to estimates from key informant interviews according to which about 90% of the work in the textile and clothing industry is sub-contracted, particularly in small and medium sized plants (Aslam Zafar and Miraj, 2004). Similarly, Khan (2001) states that sewing garments is one of the most common activities to be taken on by female workers on a sub-contracting basis.

Table 2: Direct employment in textiles, 1999

Sectors	Employment
Spinning	342,000
Weaving (shuttle looms)	675,000

Weaving (shuttleless looms)	75,500
Knitting	350,000
Finishing	35,000
Towelling	27,750
Made-ups	100,000
Garments	400,000
Total	2,005,250

Source: APTMA, in: Khan (2003)

In 2000, the total workforce in the textile and clothing industry including informal employment totalled 2.3 million, representing about 40% of the manufacturing workforce (Azam, 2004). Table 2 underlines that the bulk of the workforce is employed in weaving and in the garment sub-sector. The figures in Table 2 are likely to underestimate employment in the garment sub-sector. Figures culled from other sources mention at least 700,000 workers (USITC, 2003). This might be due to the enormous importance of the informal sector for garment production in Pakistan (Khan, 2001), which is not adequately covered by statistics. During the past three years, about 330,000 workers have been added to this figure. It is assumed that stitching units mainly generated this additional employment due to their labour-intensive nature (Azam, 2004). A doubling of employment is expected to be possible in garments as the sector is assumed to have the potential for promoting future export growth and for the creation of low cost employment at all levels (SMEDA, 2000). This, however, would require significant investment and quality improvement. As will be shown below (section 6), such investment has not taken place in the Pakistani clothing industry to a sufficient degree. The above quoted assumption can thus be considered rather optimistic. In contrast to labour-intensive stitching, with about 20,000 persons, direct employment, e.g. in knitwear is low due to mechanisation (USITC, 2004).

This distribution of the workforce is reflected in the empirical data gathered. In the companies surveyed, the largest share of the workforce in composite units is commonly employed in stitching. Of the six composite establishments integrating stitching units, the share of the workforce employed in stitching varies between 60% and 29% of the total. Whereas the overall relative employment of female workers varies between 50% and 1%, with most establishments having about 20% female employment (five out of ten), relative female employment in stitching is considerably higher, between 75% and 41% of the total workforce in the respective units. Female workers would, however, not work during the evening shifts. This finding differs from the information given in Khan (2001) stating that women workers dominate employment in the clothing sector. It may be qualified by the fact that the emphasis of survey conducted was on the formal sector. Employment in spinning, weaving, and processing was found to be exclusively male. Reasons given for the horizontal segregation of female workers in stitching are women's constrained mobility due to "purdah" (four out of six interviews where reasons were given explicitly) and the reference to women's greater skills in tasks like sewing (four out of six interviews where reasons for the segregation were given explicitly). Other rationales stated are a preference of women for physically less demanding work and their responsibility for reproductive work, such as cooking. Restricted mobility and women's responsibility for cooking are the reasons given for why women would work in the morning shift only.



Observers agree that much remains to be improved with respect to working conditions in the Pakistani textile and clothing sector, particularly with respect to health and safety conditions (Aslam Zafar and Miraj, 2004; Ghayur and Zar, 1993; Taj, no date). During the fieldwork conducted, working conditions in large, composite units are found to be better than in smaller units or cottage industries. Typical health hazards include the cotton or yarn dust inhaled by workers in spinning, weaving, sizing, and knitting. These may lead to asthma, tuberculosis, black cough, and cancer (Taj, no date). As pointed out above, these are male-dominated production units. A dusty work environment without protective equipment for the workers is observed even in large establishments (three out of ten establishments observed). The high noise level in the same units may impair their sense of hearing (Aslam Zafar and Miraj, 2004). Very noisy working environments are noticed in six out of nine establishments visited. Only in one of them workers wore earplugs. In processing, the chemicals applied for bleaching and dyeing represent health hazards for the predominantly male workforce. Resulting health problems include chest illnesses and skin diseases. In four of the seven units including textile processing, workers do not wear any protective equipment, such as masks, gloves, and boots. In the stitching units visited, characterised by a large share of female workers, working conditions are better than other units. Light and air conditions are sufficient.

Paralleling findings by Ghayur and Zar (1993), commonly workers are regular employees of the respective companies. Stitching employment is an exception in this respect. In four out of seven establishments including stitching units, the majority<sup>7</sup> of workers in stitching are employed via sub-contractors and paid on a piece rate.

Pakistani wages in textile production are amongst the lowest worldwide, second after Bangladesh (World Bank, 2004). Hourly wages for spinning and weaving for 2000, including medical insurance and fringe benefits were USD 0.37 per hour. They declined to USD 0.34 in 2002 (USITC, 2004). These represent 13.9% and 4.6% of cash costs in apparel and textile production, respectively (World Bank, 2004).

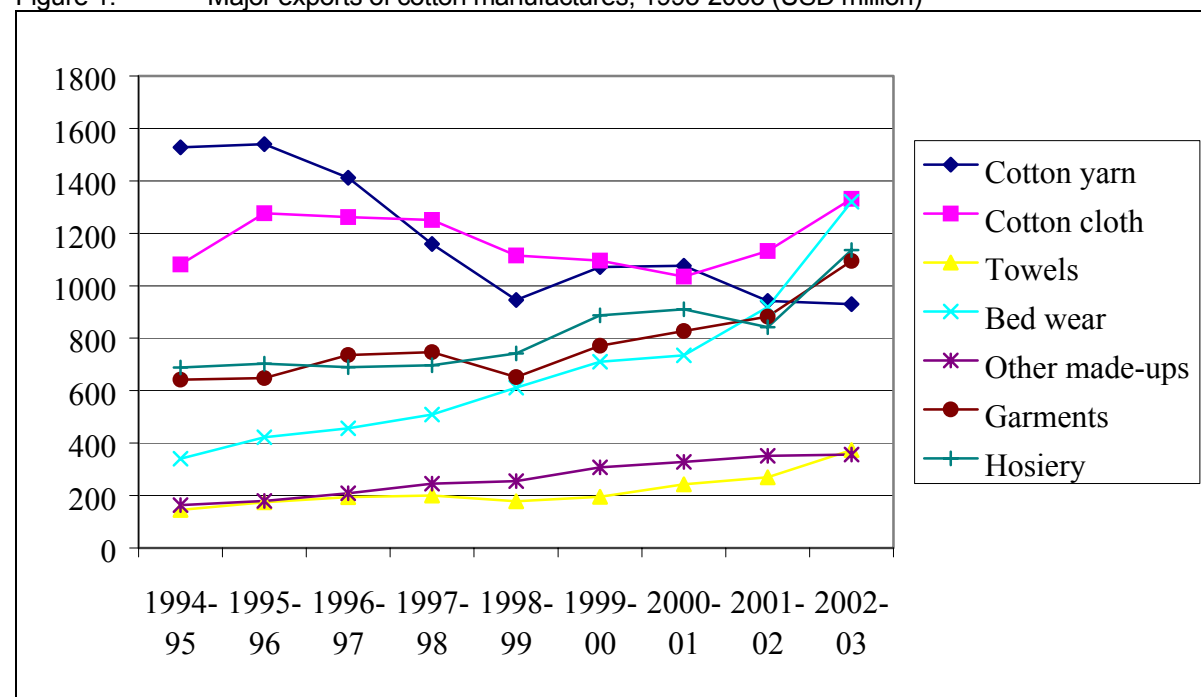
## 6. Pakistan's Trade in Textiles and Clothing

Despite low labour costs as a competitive factor, Pakistani textile and clothing exports have stagnated during the past years whereas world exports grew at a rate of about 4%, mainly on account of clothing (SMEDA, 2000). They have picked up in 2003, though (Ministry of Finance, 2003). Figure 1 displays the development and distribution of textile and clothing exports across various product categories.

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7 10% of the workforce in the stitching unit in one exceptional case. In that company, until last year, all workers in that unit were employed on piece rates. It was due to quality considerations that they changed to permanent contracts because quality suffered from the time pressure typical for piece-rates.

Figure 1: Major exports of cotton manufactures, 1995-2003 (USD million)



Source: APTMA (2004a)

It shows that in trade as well, the stress is on early stages of the processing chain with cotton fabrics and cotton yarn as large portions of textile and clothing exports. However, knitwear and made-ups also take a significant and increasing share in the export composition. This is reflected in the comparative performance of Pakistani textile and clothing exports. The share of Pakistani cotton yarn in world trade is about 30%, and its portion of cloth trade is 8% (Ministry of Finance, 2004). However, the country's overall share in global textile and clothing exports is about one percent only due to the poor performance of the clothing sub-sector that creates a comparatively higher value-added (Federal Bureau of Statistics, 2004a).

The main buyers of Pakistani cotton fabrics are the US, China, and Turkey. The bulk of cotton yarn is exported to China, South Korea, and the US. Cotton towels and especially bed wear are Pakistan's export success stories. Between 1994 and 2002, exports in these product categories increased by 158% and 288%, respectively (Figure 1). In bed wear, Pakistan is a close second exporter to the world market after China (USITC, 2004). This increase was catalysed in 2001 by the EU's decision to provide duty free access for Pakistani clothing products to its market under the Generalised System of Preferences (GSP), with the stated reason to reward its efforts to combat drug production and

trafficking (EC's Delegation to Pakistan, 2001).<sup>8</sup> The EU's GSP grants products imported from beneficiary countries either duty-free access to its market or tariff reductions. EU imports of bed linen from Pakistan totalled 42,844mt in 2001, making the country by far the largest quota supplier to the European market (USITC, 2004). In February 2004, the EU announced to withdraw the GSP support on the import of clothing from Pakistan in 2005 on the plea that Pakistan has graduated out of this scheme (The News, 2004). At the same time, the EU imposed an anti-dumping duty of 13.1% on bed linen exports from Pakistan effective from March 2004. Four out of the surveyed five companies exporting bed wear to the EU report a decline in either sales or profits as a consequence of the measure. The Federal Bureau of Statistics (2004b) reports a slight increase in export value between March and April 2004, pointing at a reduction in profit margins rather than sales.

Pakistani exports are heavily influenced by the quota regime established under the MFA. Its exports of textiles and clothing have basically been constrained by the quota regime as can be gauged from the fact that in the past, Pakistan used 80 to 90% of its export quota under the MFA. Its phase out to be finalised in January 2005 will thus bear significant consequences for the industry. In 2001, 48% of Pakistani textile and 87% of its apparel exports were delivered to quota markets, such as the EU, the US and Canada (USITC, 2004).

A recent report by the US International Trade Commission (USITC), based amongst others on statements of industry organisations, summarises that Pakistan is likely to continue to be a competitive supplier to the US market, particularly for men's apparel, bed linen, cotton yarn, and cloth (USITC, 2004). The main reason given for this assessment was the large, relatively inexpensive labour supply, the local supply of cotton, the huge up-to-date capacity for spinning and weaving, and supportive government policies. A World Bank (2004) simulation of the effects of the quota phase out assumes positive short-run effects of the phase out on the textile sector, but a decrease in sales for clothing. As outlined in section 2, the basic idea is that those exporters relying on restricted markets are likely to loose from the phase out due to declining prices rather than benefiting from price increases in unrestricted markets. As stated above, the respective export structure for Pakistan is mixed.

The similarity in made-up products between Pakistan and its competitors is high (World Bank, 2004). The fact that the degree of similarity with major competitors is higher for made-up products than for textiles, however, suggests that in contrast to the scenario provided by the USITC, these product groups will suffer most from increased competition after the full implementation of the ATC.

A strategy paper for the Pakistani textile and clothing sector developed by the Small & Medium Enterprise Development Authority (SMEDA, 2000), "Textile Vision 2005", identifies amongst other things the following weaknesses of the sector: a narrow export product base, contamination in cotton, lack of modern ginning and improper dyeing, a focus on low value added yarns and fabrics rather than made-ups and garments, little activity in the area of synthetic fibres, and a lack of focus on a trained workforce in high-value added industries, such as clothing. Increased attention for garments and made-up articles as well as improved quality throughout the textile chain is advocated as a response to these challenges. This implies technology upgrading at all stages of textile processing, human resources development, and improved marketing.

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8 The European Commission announced the simplification of its GSP scheme on July 7 2004. According to that communication, the special scheme to combat drug production and trafficking would expire on 31 December 2005 (EC, 2004).

These concerns are only partly addressed in the preparation for the phase out of the quota regime. In most interviews conducted, managers assume increased competition to be the likely result of the phase out of the quota regime (six out of ten). Both producers of fabric, made-ups, and garments are represented among them. They do so explicitly (four out of ten) and/or implicitly, by referring to the role of China as a future main competitor (four out of ten). In two interviews, interviewees state that they anticipate sales to increase, in particular to previous quota markets. This reflects the likely increase in quantities demanded caused by price declines in previously restricted markets mentioned above. In both cases, the companies are mainly exporting bed wear. In one case, a large integrated producer of garments and made-ups expects NTBs imposed by importing countries, such as the anti-dumping measures imposed on Pakistan by the EU in March 2004 or environmental standards, to increase in future. This mirrors a view expressed by Jahangir (2003). He stresses that buyers' discretion towards textile products from Pakistan and penetration of Pakistan's products in the international market will be dependent on compliance on environmental and labour issues.

Asked about their preparations for the quota phase out, most managers (eight out of ten) state that their company has upgraded the machinery. Overall, an amount of USD 4 billion has been invested in the industry from 1999 to 2003 (Ministry of Finance, 2004). The bulk of the investment (47%) went into spinning, whereas the clothing sector (including knitwear) obtained only 4.8% of the total (Ministry of Finance, 2004), i.e. about one third of the investment targeted in the "Textile Vision 2005" (Ministry of Finance, 2003). This was supported by the primary information gathered, where interviewees specified the type of machinery upgraded, in weaving and processing rather than in stitching. The greater volume invested in earlier stages of textile processing is partly due to the much more capital-intensive nature of spinning, weaving and processing as compared to stitching. Motivations for the investments were cost cuts, e.g. for chemicals, water, and labour (four out of ten). Associated with the upgrade are expansions of the product range (three out of ten), including movements towards higher value added products, and capacity increases (six out of ten).

From the explorative interviews conducted, the following implications of these preparations for the workforce can be gauged. In most cases, interviewees stated that their preparations for the phase out, in particular machinery upgrades implemented or intended, would save labour as briefly mentioned above (four out of seven cases where implications for the workforce were explicitly mentioned). This especially, appears to be the case with investment in processing, such as printing and dyeing, as well as in knitting. The capacity increases planned or implemented, thus, do not necessarily add to the workforce. This is due to the replacement of old machinery that will increase production capacity and reduce the workforce. In spinning and weaving, for example, investments were mainly related to the replacement and modernisation of existing equipment. As stated above, stitching units are not the primary targets for machinery upgrades (two out of seven companies included stitching units). However, the scope for labour saving efficiency improvements here is limited, as one sewing machine has to be operated by one person. Expansions in these units consequently translate into additional employment. It is estimated that a USD 1 million investment creates 500 jobs. Thus, the above-mentioned increase in the overall workforce of the industry appears to be mainly related to the clothing sub-sector only. Trade union representatives observe an overall reduction of the labour force in the industry as a result of machinery upgrading (Aslam Zafar and Miraj, 2004). Put together, these observations match results of the interviews conducted during the fieldwork.

The remaining question is what consequences this will bear for the gender composition of the workforce in the textile and clothing industry. Will women lose out in technological upgrading? Will female employment become a buffer for trade intensification? The next section draws conclusions from the initiated and anticipated restructuring in the Pakistani textile and clothing industry for the gender composition of its workforce.

## **7. Potential ATC Effects on the Gender Composition of the Workforce**

According to Elson (1999), stereotypes that associate roles and tasks with the male or female gender provide a link between the paid labour market and reproductive work, making both spheres “bearers of gender”. Instead of being the outcome of choices of free agents who specialise according to their comparative advantage, features of the labour market are therefore treated as being shaped by social norms constraining the actors’ choices. One such norm is what Elson and Çağatay (2000) term the “male breadwinner bias”. It refers to the perception of women being dependants of wage earners, who provide the main source of household income, and specialising in (unpaid) reproductive work.

Pakistan provides a case in point. Male honour is closely interlinked with women’s sexual behaviour, and women’s movements are therefore restricted and controlled through the system of “purdah”, or female seclusion (ADB, 2000). The Pakistani labour market mirrors these patriarchal gender relations. Women’s, rather than men’s, choices of economic activities are restricted by the above mentioned socio-cultural perceptions. This is reflected in the distribution of female and male employment across occupations and economic sectors.

Female, rather than male, workers are highly concentrated in only a few occupations and sectors. For example, there is a high concentration of female workers in agricultural work and unskilled occupations. These two occupations alone account for more than two thirds of the total female employment. Sectorally, almost 100% of female workers are employed in agriculture, manufacturing, and social and personal services (Federal Bureau of Statistics, 2003).

A finer disaggregation of sectoral employment would show that even within major industries female and male employment is segregated. The high concentration of women workers in stitching units or garments production within the Pakistani textile and clothing industry is an example. The fact that females’ reproductive responsibilities are given as a rationale for female workers’ segregation in the morning shift illustrates that reproductive and market work are interwoven, that the labour market is a “bearer of gender”. As will be shown below, this horizontal segregation is crucial for an assessment of the effects of macro-economic changes as the full implementation of the ATC.

Based on previous research and own exploratory fieldwork, the following sectoral dynamics can be expected from the abolition of the quota regime for the textile and clothing industry in Pakistan: Increased demand for some of the products whose exports were previously restricted, such as made-ups and garments, is an expected outcome of the regime change. Pakistan, however, is likely to experience increased competition in the product range the country so far has a comparative advantage in, particularly in made-ups and low-end garments.

The industry is upgrading machinery in order to diversify their product range, to move to higher value added products, and to satisfy buyers' increased pressure for quality improvements. Upgrading is also related to capacity increases. In many cases, such investments can be labour saving, e.g. in weaving, knitting, and processing. As elaborated above, in stitching, however, the scope for labour-saving investment is limited. Capacity increases in sewing, however, are positively correlated with employment. Upgrading of machinery here, thus, can be assumed to translate into additional employment. However, as stated above, it is in these units' products, such as made-ups and garments that Pakistan is going to face strong competition while the necessary upgrading lags behind. The employment elasticity of investment<sup>9</sup> and capacity increases in stitching thus might also work the other way round, i.e. translate into a large number of job losses in case of a slump in demand for Pakistani made-ups and garments.

One can hypothesise the preparations for the phase out of the quota regime to bear the following short-term implications for the gender composition of the workforce in the Pakistani textile and clothing sector:

The workforce in the units affected by labour-saving investments is predominantly male. Capacity increases have higher positive employment elasticity in those units with a high concentration of female workers. Thus, the current preparations for greater liberalisation in trade in textiles and clothing may increase relative female employment in the industry in the short run. This process mirrors a skill polarisation as suggested by Standing (1999). By upgrading machinery, unskilled male work in the capital-intensive stages of the textile chain is substituted. For the remaining workers in these units, average skill requirements increase, as they must be able to operate more sophisticated technology. In the labour intensive stages of textile processing, the female share of employment remains relatively high. These two developments combined may lead to a skill polarisation with a small number of specialised, male employees and a larger workforce with little training requirements of which a considerable portion is female. In short, during the preparations for the full implementation of the ATC in the short term, horizontal segregation in the Pakistani textile and clothing industry may protect female rather than male workers from potential lay offs. This is also in line with the segmentation hypothesis quoted above. The concentration of female employment in sewing/garment production may serve as a safeguard against being hired and dismissed procyclically.

The long-term implications of full implementation of the ATC for the gender composition of the workforce are less clear. They depend on the structure of the industry after the abolition of the quota regime, and thus on the competitive position of the Pakistani textile and clothing industry in the post-quota era. Three basic scenarios are conceivable: First, the industry's export composition remains at the status quo, as assumed e.g. by Khan (2003). Second, Pakistan may not be competitive in made-ups and garments, but specialise, in yarn and fabric. Third, the Pakistani textile and clothing industry climbs up the value added chain and shifts its export composition towards made-ups and especially garments as envisaged e.g. by the "high road scenario" in the strategy paper "Textile Vision 2005" (SMEDA, 2000). The first scenario obviously would not change the conclusions drawn from the short-term considerations stated above. The second scenario would lead to large absolute employment losses, as it is the clothing sub-sector that is considerably more labour-intensive than earlier stages of textile processing. Due to the horizontal gender segregation in the industry, it would also imply a significant decrease in relative female employment.

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9 The employment elasticity of investment refers to the extent to which employment increases proportionately with investment.

The third scenario would translate into comparatively large absolute employment gains and would also increase relative female employment as it is in stitching of made-ups and garments that the majority of female workers in the textile and clothing industry is employed.

Several factors make the second scenario the most probable outcome of the industry's restructuring. As stated above, the degree of similarity of Pakistani made-up products with those of its competitors is higher than for textiles. In addition, the EU anti-dumping and graduation policies outlined in section 6 are likely to seriously harm the respective exports to the EU, i.e. Pakistani bed wear and clothing. This makes it likely that these product groups will suffer most after the full implementation of the ATC. Besides, the fact that the clothing industry has not been the focus of technology upgrading, human resources development, and quality improvements may have negative repercussions for the sub-sector, its workforce in general, and for female workers in particular.

Apart from the gender composition of the workforce, the regime change is likely to impact upon working conditions. Increased competition in global trade in textiles and clothing will lead to downward pressure on prices and increased demand for shorter lead times and better quality. It can be assumed that these demands are passed on to the weakest link in the supply chain, namely the worker (Oxfam International, 2004)<sup>10</sup>. Increased cost competition for the Pakistani textile and clothing industry might lead to an increase in precarious forms of employment, in particular piece rate payments in stitching. They provide more flexibility to the employer and reduce overhead costs. For the worker, such contract types imply an increase in occupational safety and health (OSH) risks as well as a decrease in fringe benefits, e.g. health insurance. Again, due to the horizontal gender segregation of the industry this can be assumed to affect female rather than male workers.

These potential effects of the full implementation of the ATC in January 2005 on the gender composition of the workforce in Pakistan's textile and clothing industry lead to the following policy recommendations:

- Female rather than male workers may bear the consequences of a potential deterioration of working conditions due to their concentration in units where piece rates and other types of precarious contracts are common. Thus, more stress on labour standards to protect workers from harmful consequences of trade intensification is necessary. This includes the establishment of effective enforcement mechanisms to ensure compliance with labour legislation, particularly in ensuring the women workers' enrolment to a social security system for health, maternity, disability, and retirement benefits. Workers, especially women workers' right to organise should be emphasised. Positive incentives, such as tax cuts or subsidies for those companies that protect workers' rights are conceivable. For the industry, it might have the welcome side effects to help ensure quality, and to counter expected NTBs related to poor labour standards.
- Displaced women workers have more difficulties in finding job alternatives than men due to their higher concentration in few sectors in the labour market in Pakistan. Thus, to protect women workers from potential long-term job losses, policy reactions should include enhanced training opportunities for female workers. Information centres related to employment opportunities and orders may be established. Besides, the industry's quality requirements that are likely to increase after the quota regime has been abolished will require an educated workforce. Human resources development is, therefore, advocated by the sectoral strategy "Textile Vision 2005", by the World Bank (2004), and others (e.g. Kazmi, 2002). It is, however, not reflected in companies' policies. What is needed is a special focus on female workers due to their greater vulnerability in the labour market.

10 A counterrotating trend is increasing pressure from buyers on medium- and large-sized companies to adhere to social standards. It is caused by consumer demand in Northern markets and is likely to intensify in the context of labour standard-related NTBs.

- To enhance female access to jobs, improvement of transport to work is necessary. Its provision may be the employer's responsibility or publicly subsidised. Given the expressed interest of managers in the textile and clothing industry to have greater access to female labour supply, the industry should take the lead here. This does not only hold true for employment in the textile and clothing industry but for all other types of industrial employment as well.

## References

- All Pakistan Textile Mills Association (APTMA) (2004c), *Global Production of Cotton Cloth*, Available at: <http://www.apتما.آg.pk/formstemp/gpc.asp>
- APTMA (2004b), *Global Production of Cotton Yarn*, Available at: <http://www.apتما.آg.pk/formstemp/gpyarn.asp>
- APTMA (2004a), *Exports of Cotton & Cotton Manufactures*, Available at: <http://www.apتما.آg.pk/formstemp/ecm.asp>
- Asian Development Bank (ADB) (2000), *Women in Pakistan*, Country Briefing Paper, Available at: [http://www.adb.org/Documents/Books/Country\\_Briefing\\_Papers/Women\\_in\\_Pakistan/women\\_pakistan.pdf](http://www.adb.org/Documents/Books/Country_Briefing_Papers/Women_in_Pakistan/women_pakistan.pdf)
- Aslam Zafar, H. M., General Councillor U.C. No. 195 Arban, and Miraj, A., Muttahida Labour Federation/Labour Coordinator/Pakistan Sugar Mills Workers Federation (2004): Key informant interview conducted on April 13 and 15, 2004, Faisalabad
- Azam, M., Deputy Secretary Textile Wing, Ministry of Commerce (2004): Key informant interview conducted on April 29, 2004, Islamabad
- Board of Investment of the Government of Pakistan (2004): Textile Sector. Available at: [http://www.pakboi.gov.pk/Industry\\_Data/textile\\_vision.html](http://www.pakboi.gov.pk/Industry_Data/textile_vision.html).
- Çağatay, N. (1998), *Engendering Macroeconomics and Macroeconomic Policy*, UNDP Working Paper 6, New York, Available at: <http://www.undp.org/poverty/publications/wkpaper/wp6/wp6-nilufer.pdf>
- Çağatay, N. (2001), *Trade, Gender and Poverty* UNDP, New York, Available at: [http://www.undp.org/mainundp/propoor/docs/pov\\_tradegenderpoverty\\_doc.pdf](http://www.undp.org/mainundp/propoor/docs/pov_tradegenderpoverty_doc.pdf)
- Emerging Textiles (2004), China dominates Post-Quota Market in Norway, Available at: <http://www.nortrade.com/Textiles/News/ShowNews.aspx?id=2736&sectorid=38>
- European Commission (EC) (2004), “Generalised System of Preferences”, Press release July 7, 2004, Available at: [http://europa.eu.int/comm/trade/issues/global/gsp/pr070704\\_en.htm](http://europa.eu.int/comm/trade/issues/global/gsp/pr070704_en.htm)
- EC's Delegation to Pakistan (2001), “European Commission proposes Comprehensive Preferential Trade Package for Pakistan”, Available at: <http://www.delpak.cec.eu.int/WHATSNEW/press8.htm>.
- Elson, D. (1999), “Labour Markets as Gendered Institutions: Equality, Efficiency and Empowerment Issues”, *World Development*, 27 (3), pp. 611-627
- Elson, D. and Çağatay, N. (2000), “The Social Content of Macroeconomic Policies”, *World Development*, 28 (7), pp.1347-1364
- Ertürk, K. and Çağatay, N. (1995), “Macroeconomic Consequences of Cyclical and Secular Changes in Feminization: An Experiment in Gendered Macromodelling”, *World Development*, 23 (11), pp. 1969-1977



- Federal Bureau of Statistics of the Government of Pakistan (2004b), *Advance Release of Monthly Review Foreign Trade April 2004*, Islamabad, Available at: [http://www.statpak.gov.pk/depts/fbs/statistics/external\\_trade/monthly\\_external\\_trade/met4/met.html](http://www.statpak.gov.pk/depts/fbs/statistics/external_trade/monthly_external_trade/met4/met.html)
- Federal Bureau of Statistics of the Government of Pakistan (2004a), *Monthly Review Foreign Trade January 2004*, Islamabad, Available at: [http://www.statpak.gov.pk/depts/fbs/statistics/external\\_trade/monthly\\_review/review.pdf](http://www.statpak.gov.pk/depts/fbs/statistics/external_trade/monthly_review/review.pdf)
- Federal Bureau of Statistics of the Government of Pakistan (2003), *Labour Force Survey 2001-2002*, Islamabad, Available at: [http://www.statpak.gov.pk/depts/fbs/publications/lfs2001\\_2002/lfs2001\\_2002.html](http://www.statpak.gov.pk/depts/fbs/publications/lfs2001_2002/lfs2001_2002.html)
- Ferenschild, S. and Wick, I. (2004), *“Global Game for Cuffs and Collars, The phase-out of the WTO Agreement on Textiles and Clothing aggravates Social Divisions”*, Siegburg/Neuwied, Available at: [http://www.suedwind-institut.de/downloads/global-game\\_download.pdf](http://www.suedwind-institut.de/downloads/global-game_download.pdf)
- Ghayur, S. and Zar, Z. (1993), *Pakistan: Working Conditions in the Textile Sector*, A Study of the Large-scale Textile Manufacturing Sector in the city of Karachi, Islamabad
- Global Alliance for Fair Trade in Textiles and Clothing (2004), *Brussels Communiqué by the Istanbul Declaration Partners in the Global Alliance for Fair Trade in Textiles and Clothing*, Available at: <http://www.ncto.org/newsroom/brussels02.pdf>
- ILO (2003), *Time for Equality at Work*, Geneva, Available at: <http://www.ilo.org/public/english/standards/decl/publ/reports/report4.htm>
- Jahangir, N. (2003), “WTO and Pakistan: The Way Ahead”, *Entrepreneur*, 1 (4), pp.1-5
- Joekes, S. (1995), *Trade-Related Employment for Women in Industry and Services in Developing Countries*, United Nations Research Institute for Social Development (UNRISD) Occasional Paper No. 5, Geneva
- Kazmi, A. A. (2002), *Coping with the Agreement on Textile and Clothing (ATC): A Case Study of the Textile Sector in Pakistan*, LEAD Pakistan, Islamabad
- Khan, F. S. (2001), Background of the Industries surveyed, Sayeed, A. and Khattak, S. G., *Women’s Work and Empowerment Issues in an Era of Economic Liberalisation: A Case Study of Pakistan’s Urban Manufacturing Sector*, Karachi/Islamabad
- Khan, Z. (2003), *Impact of post-ATC Environment on Pakistan’s Textile Trade*, Asia Pacific Regional Initiative on Trade, Economic Governance and Human Development, Available at: <http://www.asiatradinginitiative.org/docs/2004-Feb/42.%20Pakistan%20Textile.pdf>
- Mehra, R. and Gammage, S. (1999), “Trends, Countertrends, and Gaps in Women’s Employment”, *World Development*, 27 (3), pp. 533-550
- Miller, C. and Vivian, J. (eds) (2002), *Women’s Employment in the Textile Manufacturing Sectors of Bangladesh and Morocco*, UNRISD. Available at: [http://www.unrisd.org/80256B3C005BCCF9/\(httpPublications\)/8E4D52B2473D993DC1256C4C004D6341?OpenDocument&panel=additional](http://www.unrisd.org/80256B3C005BCCF9/(httpPublications)/8E4D52B2473D993DC1256C4C004D6341?OpenDocument&panel=additional)
- Ministry of Finance, Government of Pakistan (2004), *Economic Survey 2003-04*, Islamabad, Available at: <http://www.finance.gov.pk/survey/home.htm>
- Ministry of Finance, Government of Pakistan (2003), *Economic Survey 2002-03*, Islamabad, Available at: <http://www.finance.gov.pk/survey/home.htm>
- Oanda.com (2003), FX History: Historical Currency Exchange Rates, Available at: <http://www.oanda.com/convert/fxhistory>

- Oxfam International (2004), *Stitched up: How rich country protectionism in textiles and clothing trade prevents poverty alleviation*, Oxfam Briefing Paper 60, Available at: [http://www.oxfam.org.uk/what\\_we\\_do/issues/trade/downloads/bp60\\_textiles.pdf](http://www.oxfam.org.uk/what_we_do/issues/trade/downloads/bp60_textiles.pdf)
- Patton, M. Q. (1990), *Qualitative Evaluation and Research Methods*, 2<sup>nd</sup> edition, Newsbury Park CA.
- Seguino, S. (2000), “Accounting for Gender in Asian Economic Growth”, *Feminist Economics*, 6 (3), pp.27-58
- Sen, A. (1990), “Gender and Cooperative Conflicts”, Tinker, I. (ed.), *Persistent Inequalities*, Oxford, pp.123-149
- Siegmann, K. A. (2004, forthcoming), *Gender Employment and Equity – Effects of Foreign Direct Investment in Rural Indonesia*, Singapore
- Small & Medium Enterprise Development Authority (SMEDA) (2000), *Textile Vision 2005 Summary Report*, Lahore
- Standing, G. (1999), *Global Feminization through Flexible Labor: A Theme Revisited*, *World Development*, 27 (3), pp.583-602
- Steinberg, R. J. (1990), “Social Construction of Skill: Gender, Power and Comparable Worth”, *Work and Occupations*, 17 (1990), no. 4, pp.449-482
- Taj, C. Z. A. (no date), *Globalisation and International Development in Textiles and Garments, Country Report of Pakistan to the International Textile, Garments and Leather Workers Federation*, Available at: [http://www.tgwu.org.uk/TGWUInternatEd/Textiles/country\\_report\\_of\\_pakistan.htm](http://www.tgwu.org.uk/TGWUInternatEd/Textiles/country_report_of_pakistan.htm)
- No author (2004), “Textile exports”. *The News*, February 19, 2004, Available at: <http://www.jang.com.pk/thenews/feb2004-daily/19-02-2004/oped/editorial.htm>
- United Nations Conference on Trade and Development (UNCTAD) (2004), *Trade and Gender: Opportunities, Challenges and the Policy Dimension*, Note by the UNCTAD secretariat, Available at: [http://www.unctad.org/en/docs//td392\\_en.pdf](http://www.unctad.org/en/docs//td392_en.pdf)
- United States International Trade Commission (USITC) (2004), *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market*, Available at: <http://hotdocs.usitc.gov/pub3671/pub3671.pdf>
- Wood, A. (1991), “North-South Trade and Female Labour in Manufacturing: an Asymmetry”, *Journal of Development Studies*, 27 (2), pp.168-189
- World Bank (2004), *Textile and Clothing Policy Note: Implications for Pakistan of Abolishing Textile and Clothing Export Quotas*, Washington DC.
- WTO (1995), *Trade Policy Review Pakistan 1995*, Geneva, Available at: [http://www.wto.org/english/tratop\\_e/tpr\\_e/tp1\\_e.htm](http://www.wto.org/english/tratop_e/tpr_e/tp1_e.htm)
- WTO (1994), *Agreement on Textiles and Clothing*, Marrakesh, Available at: [http://www.wto.org/english/docs\\_e/legal\\_e/16-tex.pdf](http://www.wto.org/english/docs_e/legal_e/16-tex.pdf)

## Appendix

Table A1: Overview of the Companies Surveyed

Size	Export	Export market	Main product	Expectation	Preparation	Labour market implications	Workforce composition
400-500	100%	Mixed	Garments, made-ups	Increased competition sales increase to quota markets	Cost cuts through capacity increase		60% of total workforce in stitching, 30% in weaving, 10% in sizing and other units. Overall 22% female workers. 50% of workforce in stitching female.
6000	100%	Quota	Made-ups	China as main competitor	Machinery upgrade Quality improvement Product diversification capacity increase		33.3% of workers employed in stitching, 5% in weaving, 11% in processing. Overall 15-20% female workers. Female workers in stitching (morning shift).
200-300	40%	Quota	Fabric		Cost cuts Non-tariff barriers (ISO cert.) Product diversification (dyes, fabrics) Value addition	Labour-neutral	0% female workers. 9% administrative workers
7500	100%	80% quota	Garments, made-ups, fabric	Increased competition NTBs	Machinery upgrade (weaving, processing, stitching) Product diversification (marketing strategy) Capacity increase Non-tariff barriers (wastewater treatment plant)	Labour-demanding (15% increase during the next year)	3% employees in sales 21% female workers, of which 75% work in stitching. There, supervisors are mostly male. No information about (relative) size of stitching unit.
3500	100%	Quota	Garments	No worries	Machinery upgrade (processing) cost cuts	Labour-saving (processing)	15% female workers, of which 80% work in stitching. Stitching 29% of the total workforce.
6	99%	Quota	Garments	No worries	Machinery upgrade (stitching) Capacity increase Quality improvement	Labour-saving (stitching)	50% female workers. All in stitching as this is main activity.
3000	100%	Quota	Garments, fabric	Increased competition.  China as main competitor	Machinery upgrade (dyeing) Cost cuts (dyeing, knitting, stitching) Capacity increase (stitching) Quality improvement Textile ministry to cut TAC	Labour-saving (dyeing, cutting, knitting) Labour-demanding expansion, labour neutral upgrade (stitching)	17% female workers, mostly in stitching.

Table A1: Overview of the Companies Surveyed (continued)

Size	Export	Export market	Main product	Expectation	Preparation	Labour market implications	Workforce composition
					Machinery upgrade Cost-cuts (through composite unit)	Labour-saving (transport, loading)	
27500	60-70%	Mixed	Made-ups	Increased competition. China as main competitor sales increase	Machinery upgrade (weaving, processing) Cost-cuts (through composite unit) Value addition Export market diversification Capacity increase Quality improvement (cotton) Non-tariff barriers (SA 8000)	Labour-neutral	55 female workers, of which the largest share in packing.
40	100%	Quota	Fabric	China as main competitor.	Machinery upgrade		0% female workers.

Source: Author's compilation

Table A2: Exchange rates United States Dollars (USD) to Pakistan Rupees (PKR)

Year	1 USD equals PKR
1995	32.87
1996	37.44
1997	42.72
1998	50.68
1999	53.46
2000	56.10
2001	65.14
2002	64.75
2003	62.29

Source: Oanda.com (2003)

Note: The cash rate is displayed, i.e., the inter-bank exchange rate plus 4%.

